

REMARKS

Claims 1-4 and 8-10 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kellermann, U.S. Patent No. 5,602,962, (hereinafter "Kellermann"). Claim 5-7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kellermann in view of Kaneda, U.S. Patent No. 4,536,887, (hereinafter "Kaneda"). Claims 1-10 are in the application. Applicants respectfully submit that the pending claims, as amended, are patentable for at least the following reasons.

Amended independent Claim 1 is directed to an audio processing arrangement comprising a plurality of audio sources generating input audio signals, processing means for deriving processed audio signals from the input audio signals, the audio processing arrangement comprising combining means for deriving a combined audio signal from the processed audio signals, wherein the audio processing arrangement comprises a non-measurement based control means for controlling the processing means in order to maximize a power measure of the combined audio signal, and in that the control means are arranged for limiting a combined power gain measure of the processed audio signals to a predetermined value.

Amended independent Claim 8 is directed to an Audio signal processing arrangement comprising a plurality of inputs for receiving input audio signals , processing means for deriving processed audio signals from the input audio signals, the audio processing arrangement comprising combining means for deriving a combined audio signal from the processed audio signals, wherein the

audio processing arrangement comprises a reverberation reducing control means for controlling the processing means in order to maximize a power measure of the combined audio signal, and in that the control means are arranged for limiting a combined power gain measure of the processed audio signals to a predetermined value. Amended independent Claim 10 recites similar limitations.

The structure of amended independent claims 1, 8 and 10 provide significant advantages in audio signal processing arrangements which there is multipath propagation from the speaker to the microphone. Such arrangements may suffer from an accousitc phenomenon known as reverberation, which degrade speech intelligibility. The present invention provides and audio processing arrangement in which no measurements have to be performed before deployment of the audio processing arrangement.

Kellermann, as read by the applicants, relates to a speech processing arrangement has at least two microphones for supplying microphone signals formed by speech components and noise components to microphone signal branches that are coupled to an adder device used for forming a sum signal. The microphone signals are delayed and weighted by weight factors in the microphone signal branches. Because the speech signals are correlated and noise signals are uncorrelated, the sum signal available on the output of the adder device has a reduced noise component yielding improved speech audibility.

Kellermann fails to teach, show or disclose an (1) audio processing arrangement comprises a non-measurement based control means for controlling the processing means in order to maximize a power measure of the combined audio signal, and in that the control means are arranged for limiting a combined power gain measure of the processed audio signals to a predetermined value and (2) audio processing arrangement comprises a reverberation reducing control means for controlling the processing means in order to maximize a power measure of the combined audio signal, and in that the control means are arranged for limiting a combined power gain measure of the processed audio signals to a predetermined value or an, as specifically recited in independent claim 1, 8 and 10 respectively.

The MPEP section 2131 provides that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. The identical invention must be shown in as complete detail as contained in the claim.

Applicant submits that Kellermann does not satisfy MPEP section 2131 as anticipatory references. Withdrawal of the rejection is respectfully requested with regard to amended independent claims 1, 8 and 10.

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as a reference against the independent claims herein. These claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from the independent claim discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of the patentability of each on its own merits is respectfully requested.

The applicants submit that the claims fully satisfy the requirements of 35 U.S.C. 102 and 103. In view of the foregoing remarks, favorable reconsideration and early passage to issue of the present application are respectfully solicited.

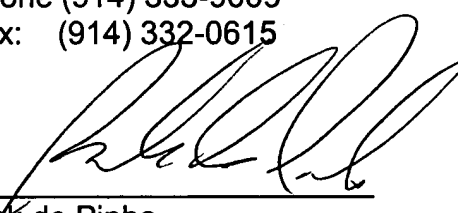
Applicants' undersigned attorney may be reached by telephone at the number given below.

Respectfully submitted,

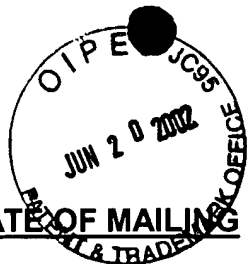
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VERSION WITH MARKING TO SHOW CHANGES MADE

Please amend the claims as follows:

1. (Amended) Audio processing arrangement comprising a plurality of audio sources generating input audio signals, processing means for deriving processed audio signals from the input audio signals, the audio processing arrangement comprising combining means for deriving a combined audio signal from the processed audio signals, ~~characterized in that~~wherein the audio processing arrangement comprises a non-measurement based control means for controlling the processing means in order to maximize a power measure of the combined audio signal, and in that the control means are arranged for limiting a combined power gain measure of the processed audio signals to a predetermined value.

8. (Amended) Audio signal processing arrangement comprising a plurality of inputs for receiving input audio signals, processing means for deriving processed audio signals from the input audio signals, the audio processing arrangement comprising combining means for deriving a combined audio signal from the processed audio signals, ~~characterized in that~~wherein the audio processing arrangement comprises a reverberation reducing -control means for controlling the processing means in order to maximize a power measure of the combined audio signal, and in that the control means are arranged for limiting a combined power gain measure of the processed audio signals to a predetermined value.

11. (Amended) Audio processing method comprising receiving a plurality of input audio signals from a plurality of audio sources, deriving processed audio signals from the input audio signals, deriving a combined audio signal from the

processed audio signals, ~~characterized in that~~wherein the audio processing method comprises reducing reverberation by controlling the processing of the audio signals in order to maximize a power measure of the combined audio signal, and in that the method comprises controlling the processing for limiting a combined power gain measure of the processed audio signals to a predetermined value.